

Date: Monday, 11/6/2006 2:40:16 PM  
 User: Kim Johnston

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : 206/OH-58 SADDLE, INBOARD, LEFT SIDE
<b>Job Number</b> : 29349	
<b>Estimate Number</b> : 10836	
<b>P.O. Number</b> : <i>N/A</i>	<b>Part Number</b> : D29391
<b>This Issue</b> : 11/6/2006 <b>S.O. No.</b> : <i>N/A</i>	<b>Drawing Number</b> : D2939 REV B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : <i>N/A</i> <b>Type</b> : MACHINED PARTS	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 28922	<b>Material</b> : <i>N/A</i>
<b>Written By</b> : <i>[Signature]</i>	<b>Due Date</b> : 11/24/2006
<b>Checked &amp; Approved By</b> : <i>[Signature]</i> 06.11.07	<b>Qty</b> : <i>12</i> <del>10</del> Um: Each
<b>Comment</b> : Est: B06.06.26 New DWG rev (mpp 2069) EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101001	7075-T7351 2X6X6.25
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)  
 Issue material from stock: 7075-T7351 QQ-A-250/12  
 Cut Size 2.0 x 6.25 X 6.00  
 Grain Along Long 6.00 Length  
 Batch No: *1325343*

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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**Comment:** HAAS CNC VERTICAL MACHINING #1  
 Program part number and batch number.  
 1-Inspect part number and batch number are programmed correctly.  
 2-Machine Step No 1 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet  
 3-Machine Step No 2 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet  
 4-Machine Step No 3 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet  
 5-Deburr

*SD 06.11.19 12*

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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**Comment:** CONVENTIONAL MILLING MACHINE  
 Machine Keyway and inspect per attached dimension sheet

*SD 06.11.20 12*

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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**Comment:** INSPECT ALL DIM TO DIM SHEET

*SD 06.11.20 12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: DP Date: 06/11/28  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06.11.17	2	TOOL RAD FOR FLANGE POCKETING IS R0.188 INSTEAD OF R0.25 0.30	UP 06.11.17 per Q51042	USE R0.188 FOR POCKETING PER MARKED UP DWG.  SEE D.S. EMAIL	SD 06.11.18	NA 06.11.17	UP 06.11.17 per Q51042	06.11.17

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 2:40:17 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, LEFT SIDE

Job Number: 29349

Part Number: D29391

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*YJL 06/11/22 12*

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

*YJL F.C. 06/11/24 X 12*

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*M102391 F.C. 06/11/27 X 12*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*P 6/14/27 (12)*

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *5741*

*P 6/14/27 (12)*

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*(12) 06/11/28*

Job Completion



*C20611128*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 29349
<b>Description:</b> 206 Saddle, Inboard, Left side	<b>Part Number:</b> D2939-1
<b>Inspection Dwg:</b> D2939 Rev. B	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		.125	.125	.125	.126		
B	0.100	0.140		.124	.126	.124	.126		
C	0.100	0.140		.113	.120	.120	.120		
D	0.210	0.230		.219	.215	.215	.218		
E	1.245	1.255		1.258	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.514	.514	.514	.514		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.501	2.501	2.501	2.501		
K	0.257	0.262	DT8683	.258	.258	.258	.258		
L	0.312	0.317	DT8686	.314	.314	.314	.314		
M	0.235	0.240		.237	.237	.237	.237		
N	0.100	0.140		.120	.121	.120	.120		
O	0.540	0.560		.550	.550	.550	.548		
P	0.490	0.510		.495	.498	.495	.495		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.740	2.740	2.740		
S	0.240	0.270		.250	.249	.250	.250		
T	0.100	0.180		.140	.140	.140	.140		
U	1.625	1.635		1.630	1.630	1.630	1.629		
V	1.362	1.372		1.364	1.364	1.364	1.365		
W	0.316	0.321	DT8690	.320	.320	.320	.320		
X	1.250	1.270		1.265	1.260	1.259	1.259		
Y	1.565	1.585	DT8695 A/B						
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: SD
Date: 06.11.18

Audited by: JML
Date: 06/11/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF JH	#

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 29349
<b>Description:</b> 206 Saddle, Inboard, Left side	<b>Part Number:</b> D2939-1
<b>Inspection Dwg:</b> D2939 Rev. B	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		.125	.125	.125	.121		
B	0.100	0.140		.125	.125	.125	.122		
C	0.100	0.140		.119	.119	.120	.120		
D	0.210	0.230		.219	.219	.219	.219		
E	1.245	1.255		1.250	1.250	1.250	1.206		
F	1.245	1.255		1.250	1.250	1.250	1.236		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.514	.514	.514	.514		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.501	2.500		
K	0.257	0.262	DT8683	.258	.258	.258	.258		
L	0.312	0.317	DT8686	.314	.314	.314	.317		
M	0.235	0.240		.237	.237	.237	.237		
N	0.100	0.140		.121	.120	.120	.1205		
O	0.540	0.560		.550	.550	.556	.558		
P	0.490	0.510		.499	.499	.500	.499		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.740	2.740	2.740		
S	0.240	0.270		.249	.249	.250	.250		
T	0.100	0.180		.140	.140	.140	.140		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321	DT8690	.320	.320	.320	.320		
X	1.250	1.270		1.2595	1.259	1.2595	1.260		
Y	1.565	1.585	DT8695 A/B	/	/	/	/		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: SD
Date: 06.11.15

Audited by: [Signature]
Date: 06/11/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF [Signature]	[Signature]

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 29349
<b>Description:</b> 206 Saddle, Inboard, Left side	<b>Part Number:</b> D2939-1
<b>Inspection Dwg:</b> D2939 Rev. B	<b>Page 1 of 1</b>

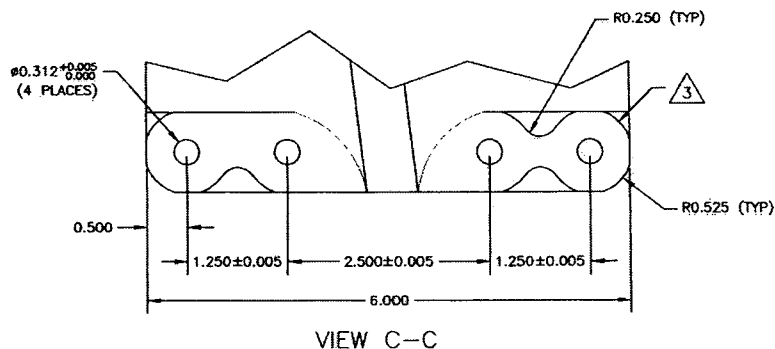
Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		.122	.122	.122	.122		
B	0.100	0.140		.124	.122	.122	.121		
C	0.100	0.140		.119	.115	.119	.119		
D	0.210	0.230		.219	.215	.220	.228		
E	1.245	1.255		1.258	1.258	1.250	1.258		
F	1.245	1.255		1.258	1.258	1.250	1.258		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.514	.514	.514	.514		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500	2.500		
K	0.257	0.262	DT8683	.258	.258	.238	.258		
L	0.312	0.317	DT8686	.314	.314	.317	.314		
M	0.235	0.240		.237	.237	.237	.237		
N	0.100	0.140		.121	.120	.121	.121		
O	0.540	0.560		.550	.558	.548	.545		
P	0.490	0.510		.500	.499	.500	.499		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.748	2.740	2.740		
S	0.240	0.270		.250	.248	.250	.250		
T	0.100	0.180		.170	.170	.170	.140		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321	DT8690	.320	.320	.320	.320		
X	1.250	1.270		1.259	1.259	1.261	1.2595		
Y	1.565	1.585	DT8695 A/B						
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	SD
Date:	06.11.20

Audited by:	ml
Date:	06/11/22

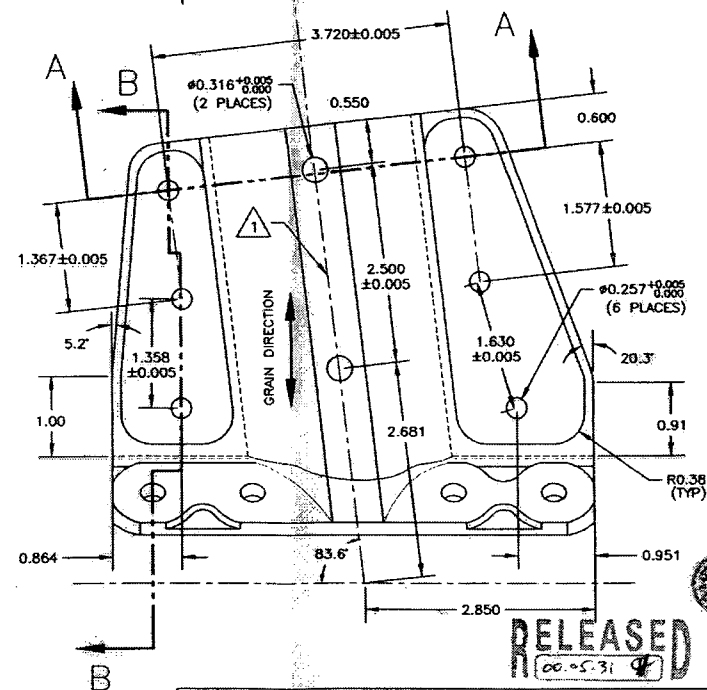
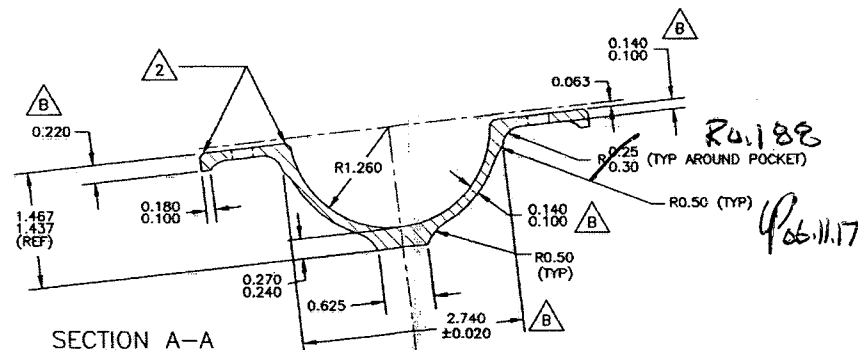
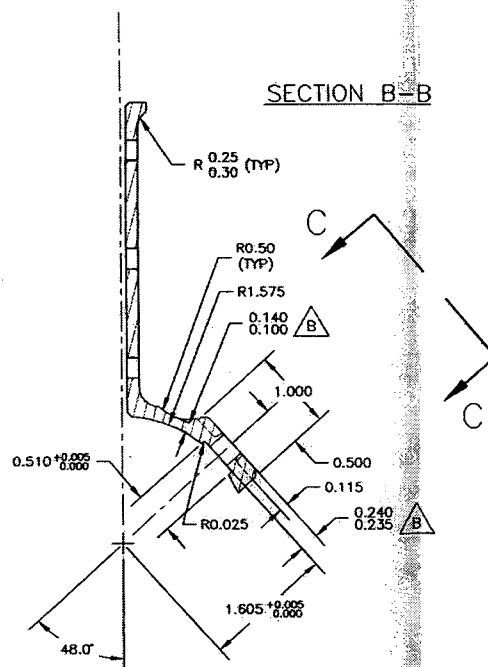
Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	#



**D2939-1 LH SADDLE (SHOWN)**  
**D2939-2 RH SADDLE (OPPOSITE)**

MATERIAL: 7075-T7351 (QQ-A-250/12)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
 DART QSI 005 4.3  
 BREAK ALL SHARP EDGES 0.010 TO 0.020  
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP
- 2 CHAMFER 0.050" x 45° AROUND THIS SURFACE (TYP 2 PLACES)
- 3 CHAMFER 0.050" x 45°



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B	00.05.29	CHANGED DEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	DRAWN BY RF	<b>DART</b> DART AEROSPACE USA, INC. BELLUVE, VA
CHECKED	APPROVED	DRAWING NO. D2939
DATE	00.05.29	TITLE SADDLE INSIDE
		REV. B SHEET 1 OF 1 SCALE 2:3

SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 29347



## Chris Provencal

---

**From:** David Shepherd [dshepherd@dartaero.com]  
**Sent:** October 19, 2006 3:31 PM  
**To:** 'S Shahbazian'  
**Cc:** 'Provencal, Chris'; 'Charbonneau, Eric'  
**Subject:** RE: Radius dimension on the saddle

Change the drawings. I guess we will also change the 0.313 crosstube hole dimensions as well.  
See D2661 to D2668 as well as D2932 to D2933.

David

---

**From:** S Shahbazian [mailto:sshahbazian@dartaero.com]  
**Sent:** Thursday, October 19, 2006 1:16 PM  
**To:** Shepherd, David  
**Cc:** Provencal, Chris; Charbonneau, Eric  
**Subject:** Radius dimension on the saddle

Dave,  
On attach saddle drawing, according to Eric the marked-up radius that reads 0.30 and 0.25, should be 0.188 since the tooling has been changed long time ago, and apparently they have been machining those radiuses to 0.188 for a while. Do you see a problem with that? if not I will go ahead and change the drawing to reflect the changes.

Serge

--  
No virus found in this incoming message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

--  
No virus found in this outgoing message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006